

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	4	"6955933"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/10/15 10:15
L2	8	("5670798"   "5810925"   "5960018"   "6045626"   "6133589"   "6515313"   "6630692").PN. OR ("6955933").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/15 10:18
L12	2	yoong-euijoon.in.	US-PGPUB; USPAT; USOCR; FPRS	OR	ON	2007/10/15 11:02
L13	0	kwon-soon-young.in.	US-PGPUB; USPAT; USOCR; FPRS	OR	ON	2007/10/15 11:03
L14	0	kwon-soon-young.in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/15 11:03
L15	0	moon-pilyung.in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/15 11:03
L16	0	seoul national industry university foundation	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/10/15 11:04
L17	4440	257/96,94,14,12,103,97.ccls.	US-PGPUB; USPAT; USOCR; FPRS	OR	ON	2007/10/15 11:04
L18	126	composition grad\$3 and 257/96,94,14,12,103,97.ccls.	US-PGPUB; USPAT; USOCR; FPRS	NEAR	ON	2007/10/15 11:05
L19	0	Al adj Ga adj In adj N same composition grad\$3 and 257/96,94,14,12,103,97.ccls.	US-PGPUB; USPAT; USOCR; FPRS	NEAR	ON	2007/10/15 11:06
L20	0	Ga adj In same composition grad\$3 and 257/96,94,14,12,103,97.ccls.	US-PGPUB; USPAT; USOCR; FPRS	NEAR	ON	2007/10/15 11:06
S1	1	("20040026699").PN.	US-PGPUB; USPAT	OR	OFF	2007/08/30 17:26
S2	1	("5864573").PN.	US-PGPUB; USPAT	OR	OFF	2007/08/30 17:27

## EAST Search History

S3	134	Al adj Ga adj In adj N	US-PGPUB; USPAT	OR	ON	2007/08/30 17:55
S4	90	Al adj Ga adj In adj N and @ad<"20040813"	US-PGPUB; USPAT	OR	ON	2007/08/30 18:27
S5	0	Al adj Ga adj In adj N near substrate and @ad<"20040813"	US-PGPUB; USPAT	OR	ON	2007/08/30 18:28
S6	0	Al adj Ga adj In adj N near substrate and @ad<"20040813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/30 18:28
S7	9	Al adj Ga adj In adj N with substrate and @ad<"20040813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/30 18:30
S8	43	Al adj Ga adj In adj N with (substrate or layer) and @ad<"20040813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/30 18:47
S9	24	("5003548"   "5476811"   "5592501"   "5646953").PN. OR ("6072189").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/30 18:36
S10	0	Al adj Ga adj In adj N with interrup\$2 and @ad<"20040813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/30 18:47
S11	0	Al adj Ga adj In adj N with interup\$2 and @ad<"20040813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/30 18:47
S12	0	Al adj Ga adj In adj N same interrup\$2 and @ad<"20040813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/30 18:47
S13	0	Al adj Ga adj In adj N same interrup\$2	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/30 18:48

## EAST Search History

S14	166	Al adj Ga adj In adj N	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/30 18:48
S15	2	Al adj Ga adj In adj N same interrup\$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/30 18:51
S16	0	Al adj Ga adj In adj N same growth adj interrup\$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/30 18:52
S17	0	Al adj Ga adj In adj N same growth near interrup\$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/30 19:14
S18	1052	growth near interrup\$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/30 19:14
S19	0	group (III-V or V-III)nitride same growth adj interrup\$4 same thickness same band adj gap	US-PGPUB; USPAT	ADJ	ON	2007/08/30 19:28
S20	0	group (III-V or V-III)nitride same growth adj interrup\$4 same band adj gap	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/08/30 19:28
S21	0	Al adj Ga adj In adj N same growth adj interrup\$4 same band adj gap	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/08/30 19:33
S22	0	Al adj Ga adj In adj N same growth adj interrup\$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/08/30 19:33

## EAST Search History

S23	2	Al adj Ga adj In adj N same interrup\$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/08/30 19:33
S24	104	(Al adj Ga adj In adj N or III-V)same interrup\$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/08/30 19:34
S25	80	(Al adj Ga adj In adj N or III-V)same interrup\$4 and @ad<"20040813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/10/14 14:06
S26	0	(Al adj Ga adj In adj N or III-V)same interrup\$4 same thickness and @ad<"20040813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/08/30 19:47
S27	22	(Al adj Ga adj In adj N or III-V)same interrup\$4 same thickness and @ad<"20040813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/08/30 19:47
S28	0	(Al adj Ga adj In adj N or III-V)same interrup\$4 same thickness same band gap and @ad<"20040813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/08/30 19:47
S29	0	(Al adj Ga adj In adj N or III-V)same interrup\$4 same thickness same band and @ad<"20040813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/08/30 19:48
S30	0	(Al adj Ga adj In adj N or III-V)same interrup\$4 same thickness same (band gap or stop band or energy gap) and @ad<"20040813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/08/30 19:48
S31	7	(Al adj Ga adj In adj N or III-V)same interrup\$4 same thickness same (energy ) and @ad<"20040813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/08/30 20:01

## EAST Search History

S32	7	"3064891"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/30 20:02
S33	0	"003064891"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/30 20:02
S34	36	(Al adj Ga adj In adj N or III-V)same quantum near well same (n or nitride)same (conductive or band or gap)near energy and @ad<"20040813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/10/14 14:24
S35	6	"186402".ap.	US-PGPUB; USPAT; USOCR; FPRS	OR	ON	2007/10/14 14:15
S36	0	(Al adj Ga adj In adj N or III-V)same quantum near well same (n or nitride)same (conductive or band or gap)near energy same (in or indium) (layer or region) and @ad<"20040813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/10/14 14:22
S37	0	(Al adj Ga adj In adj N or III-V)same quantum near well same (n or nitride)same (conductive or band or gap)near energy same (In or indium) (layer or region) and @ad<"20040813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/10/14 14:22
S38	0	(Al adj Ga adj In adj N or III-V)same quantum near well same (n or nitride)same (conductive or band or gap)near energy same grade adj region and @ad<"20040813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/10/14 14:24
S39	0	(Al adj Ga adj In adj N or III-V)same quantum near well same (n or nitride)same (conductive or band or gap)near energy same grad\$3 adj region and @ad<"20040813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/10/14 14:24
S40	4	(Al adj Ga adj In adj N or III-V)same quantum near well same (n or nitride)same (conductive or band or gap)near energy same grad\$3 and @ad<"20040813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/10/14 14:30

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S41	36	(Al adj Ga adj In adj N or III-V)same quantum near well same (n or nitride)same (conductive or band or gap)near energy and @ad<"20040813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/10/14 14:39
S42	0	(Al adj Ga adj In adj N )same quantum near well same (n or nitride)same (conductive or band or gap)near energy and @ad<"20040813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/10/14 14:40
S43	2	(Al adj Ga adj In adj N )same quantum near well same (n or nitride) and @ad<"20040813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/10/14 14:40
S44	15	("4163238"   "4620206"   "5457709"   "5570386"   "5656832"   "5679965"   "5834331"   "5923690"   "6072189").PN. OR ("6455870").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/14 14:59
S45	6	"596126".ap.	US-PGPUB; USPAT; USOCR; FPRS	OR	ON	2007/10/14 16:06
S46	4361713	((In or indium) and (nitrogen or n) ) (source or gas)quantum near well	US-PGPUB; USPAT; USOCR; FPRS	OR	ON	2007/10/14 15:14
S47	863	((In or indium) and (nitrogen or n) ) (source or gas)quantum near well	US-PGPUB; USPAT; USOCR; FPRS	SAME	ON	2007/10/14 15:14
S48	658	((In or indium) and (nitrogen or n) ) (source or gas)quantum near well and @ad<"20040813"	US-PGPUB; USPAT; USOCR; FPRS	SAME	ON	2007/10/14 15:15
S49	24	((In or indium) and (nitrogen or n) ) (source adj gas)quantum near well and @ad<"20040813"	US-PGPUB; USPAT; USOCR; FPRS	SAME	ON	2007/10/14 15:16
S50	0	((In or indium) and (nitrogen or n) ) (source adj gas) reduce quantum near well and @ad<"20040813"	US-PGPUB; USPAT; USOCR; FPRS	SAME	ON	2007/10/14 15:16
S51	0	((In or indium) and (nitrogen or n) ) (source adj gas) reduce quantum near well and @ad<"20040813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	SAME	ON	2007/10/14 15:16
S52	5	((In or indium) and (nitrogen or n) ) (source adj gas) (reduce or thin\$4 or minim\$4) quantum near well and @ad<"20040813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	SAME	ON	2007/10/14 15:18

## EAST Search History

S53	0	((In or indium) and (nitrogen or n) ) (source adj gas) (reduce or thin\$4 or minim\$4) layerand @ad<"20040813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	SAME	ON	2007/10/14 15:18
S54	265	((In or indium) and (nitrogen or n) ) (source adj gas) (reduce or thin\$4 or minim\$4) layer and @ad<"20040813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	SAME	ON	2007/10/14 15:19
S55	50	( indium and nitrogen ) ( gas) (reduc\$3 or thin\$4 or minim\$4) near4 layer and @ad<"20040813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	SAME	ON	2007/10/14 15:22
S56	5	( indium and nitrogen ) ( gas) growth (reduc\$3 or thin\$4 or minim\$4) near4 layer and @ad<"20040813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	SAME	ON	2007/10/14 15:24
S57	391	grow\$2 interrup\$4 (reduc\$4 or thin\$4 or minim\$3) gas	US-PGPUB; USPAT; USOCR; FPRS	SAME	ON	2007/10/14 15:25
S58	149	grow\$2 interrup\$4 (reduc\$4 or thin\$4 or minim\$3) gas and @ad<"20040813"	US-PGPUB; USPAT; USOCR; FPRS	SAME	ON	2007/10/14 15:30
S59	45	grow\$2 interrup\$4 (reduc\$4 or thin\$4 or minim\$3) gas with layer and @ad<"20040813"	US-PGPUB; USPAT; USOCR; FPRS	SAME	ON	2007/10/14 15:33
S60	0	grow\$2 interrup\$4 (reduc\$4 or thin\$4 or minim\$3) gas nearlayer and @ad<"20040813"	US-PGPUB; USPAT; USOCR; FPRS	SAME	ON	2007/10/14 15:33
S61	1	grow\$2 interrup\$4 (reduc\$4 or thin\$4 or minim\$3) gas near layer and @ad<"20040813"	US-PGPUB; USPAT; USOCR; FPRS	SAME	ON	2007/10/14 15:33
S62	1	"20040026699"	US-PGPUB; USPAT; USOCR; FPRS	OR	ON	2007/10/14 16:06
S63	3	"5864573"	US-PGPUB; USPAT; USOCR; FPRS	OR	ON	2007/10/14 16:22
S64	0	composition\$2 same grad\$3 same (Indium or In)adj rich In adj Ga adj N	US-PGPUB; USPAT; USOCR; FPRS	SAME	ON	2007/10/14 16:23

## EAST Search History

S65	0	composition\$2 same grad\$3 same (Indium or In)adj rich In adj Ga adj N	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	SAME	ON	2007/10/14 16:24
S66	3	composition\$2 same grad\$3 same In adj Ga adj N	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	SAME	ON	2007/10/14 16:25
S67	1252	composition\$2 same grad\$3 same In N	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	SAME	ON	2007/10/14 16:25
S68	11	composition\$2 same grad\$3 same In adj N	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	SAME	ON	2007/10/14 16:27
S69	20212	composition\$2 same grad\$3 s	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	SAME	ON	2007/10/14 16:27
S70	80169	composition\$2 same grad\$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	SAME	ON	2007/10/14 16:28
S71	62	composition\$2 same grad\$3 and (In adj Ga adj N near Al or indium adj gallium adj nitride near aluminum)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	SAME	ON	2007/10/14 16:30
S72	0	composition\$2 same grad\$3 and (In adj Ga adj N near Al or indium adj gallium adj nitride near aluminum) same "0.8" near In	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	SAME	ON	2007/10/14 16:30
S73	0	composition\$2 same grad\$3 and (In adj Ga adj N near Al or indium adj gallium adj nitride near aluminum) same "0.7" near In	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	SAME	ON	2007/10/14 16:30